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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,308	08/28/2003	Harry Krumma	60,126-228	6916

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Gregory D. DeGrazia  
Howard & Howard Attorneys, PC  
Suite 101  
39400 Woodward Avenue  
Bloomfield Hills, MI 48304-5151

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/650,308	KRUMMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yewebdar T Tadesse	1734	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,8-11 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5- 6, 14-15 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 4,16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>01/09/2004</u> .  | 6) <input type="checkbox"/> Other: ____                                     |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1,3-6 and 14-21, drawn to a coating device with a rotary atomizer, classified in class 118, subclass 300.
  - II. Claims 8-11, drawn to a method for controlling the operation of a coating device with a rotary atomizer, classified in class 427, subclass 421.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the coating device can be used for cleaning process.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Raymond Meiers on 10/25/2004 a provisional election was made with traverse to prosecute the invention of group I, claims

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1,3-6 and 14-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 5, 14-15 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi et al (US 4,700,896). As to claims 1, 3, 14-15 and 20, Takeuchi et al discloses (see Fig 1) a coating device with a rotary atomizer capable of being mounted on a coating machine, with a turbine motor (turbine wheel 30) of the rotary atomizer driven by a fluid stream, with a shaft (4) of a rotating atomizer driven by the turbine motor (turbine wheel 30) and being supported by a bearing unit (18 and 19), with an inlet path (51, 38, 24 and 25) through which the fluid stream is supplied under

pressure to a turbine wheel (30), and with an outlet path (port 55) through which the fluid stream at a lower-pressure evacuates from the bearing unit, the device comprising a heating device (69), located outside the rotary atomizer or upstream of the inlet, for heating one of the fluid stream flowing through the turbine wheel, the inlet path, and the outlet path. Takeuchi et al further discloses a rotary atomizer connected to the shaft (4), positioned externally with respect to the housing (2) adjacent the second end (end plate 13) and including a bell-shaped plate (a cup-shaped spray head 9) and a steering passage (conduit 72) for communicating a second fluid stream towards the bell-shaped plate (a cup-shaped spray head 9). As to a turbine motor, it is well known in the art to use a surface of a turbine wheel as a drive motor for a rotary atomizer (see Abstract of Baumann et al., US 2004/0164190) teaching a turbine wheel for a rotary atomizer. Regarding claim 5, In Takeuchi et al (see Fig 1), the bearing unit includes channels separate from the inlet and outlet paths wherein heated air flowing through the channels. With respect to claims 18-19, In Takeuchi et al device, the bearings (18 and 19) are air bearings and the heated air stream through inlets 24 and 25 heats the bearing.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeuchi et al (US 4,700,896) as applied to claim 1 above, and further in view of Govindan (US 3,979,535). Takeuchi et al lacks teaching a temperature sensor with the coating device. However, it is well known in the art to use a temperature sensor in supplying fluid at the desired temperature; for instance – Govindan discloses (see drawing) a temperature sensor (indicator), for the air line of a spraying device, in communication with a computer controller. It would have also been obvious to one of ordinary skill in the art at the time the invention was made to include a temperature sensor in Tomita et al device to regulate the temperature of air fed to the system as desired.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al (US 5,788,164) in view of Takeuchi et al (US 4,700,896) or Emch (US 5,863,613). Tomita et al discloses (see Fig 1) a housing (10) having a first end defining a first

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aperture and a second aperture and a longitudinal axis extending between the first aperture at the first end and second ends (see drawing for first end having first and second apertures of turbine air lines and the second end having the bell head 12); a turbine (16) positioned in the housing including an inlet and an outlet and a rotatable shaft (18); an inlet passage for communicating a first fluid (air) stream between the first aperture of the housing and the inlet of the turbine; an outlet passage for communicating the first fluid between the outlet of the turbine air (turbine exhaust air) and the first aperture; a bearing (17) supporting the shaft (18) of the turbine (16) in rotation; a rotary atomizer head (12) connected to the shaft (18) and positioned externally with respect to the housing (19) adjacent the second end and including a bell-shaped plate; at least one steering passage for communicating a second fluid stream (paint and thinner lines) between the first and the second apertures (turbine air and turbine exhaust air); and a nozzle (paint feed tube 15) in communication with the at least one steering passage to direct fluid stream towards the bell-shaped plate (bell head 12). Tomita et al lacks teaching a heater for heating at least one of the first fluid stream, the second fluid stream and the bearing. Takeuchi et al discloses (see Fig 1) a heating device (69) for heating one of the fluid streams flowing through the turbine wheel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a heating device in Tomita et al to counteract the formation of the condensate within the device. Emch discloses (see Fig 1 and column 2, lines 40-50) a heating device (heat exchanger 12) heating the coating composition supplied to the rotary atomizer (8). It would have also been obvious to one of ordinary

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skill in the art at the time the invention was made to include a heating device in Tomita et al device to reduce the viscosity of the coating composition having a high viscosity and to enable ready spray application by an electrostatic spray device as taught by Emch (see column 1, lines 5-10).

***Allowable Subject Matter***

12. Claims 4, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art of record does not disclose or suggest a coating device with rotary atomizer comprising, a heating device, among others, wherein the heating device has heat exchanger positioned along both the inlet path and outlet paths of the coating device or the heater heats the first fluid stream and is positioned downstream of the outlet.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baumann et al. (US 2004/0164190) teaching a surface of turbine wheel as a drive motor for a rotary atomizer.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T Tadesse whose telephone number is (571)





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272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
YTT

  
**CHRIS FIORILLA**  
**SUPERVISORY PATENT EXAMINER**  
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